NEW APPLICATION

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BEFORE THE ARIZONA CORPORATION COMMISSION

Arizona Corporation Commission
DOCKETED
MAR 20 2015
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COMMISSIONERS

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TOM FORESE

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR APPROVAL OF, WITH MINOR MODIFICATIONS, CONTINUANCE OF THE COMPANY's 2013 DSM IMPLEMENTATION PLAN THROUGH 2015

DOCKET NO. E-01345A-15-0095

APPLICATION

Arizona Public Service Company (APS or Company) requests that the Arizona Corporation Commission (Commission) approve, with the minor modifications proposed in this filing, continuance of the Company's 2013 DSM Implementation Plan (DSM Plan) as approved in Decision No. 74406 (March 19, 2014) through 2015 or until a subsequent plan is approved.

In 2015, APS proposes to maintain the current spending level of approximately $68.9 million as approved in the Company's current plan and keep the Demand Side Management Adjustment Charge (DSMAC) at its current level. Additionally, this application requests approval of the proposed allocation of the existing $68.9 million DSM budget including the use of $5.1 million in unallocated existing collected but unspent funds, and approval of opportunities for optimizing the DSM portfolio

performance and meeting the Company's Energy Efficiency Standard (EES) requirements at a lower cost.

The Company appreciates the substantial Commission Staff resources that are required to review a comprehensive APS DSM Plan, and recognizes that such a plan was approved in March of 2014. The modifications and additions APS proposes for 2015 are not substantial, and it is APS's intent that they would not require Staff to perform any cost effectiveness calculations in order for the Commission to approve the Company's request in this application.[1]

I. OVERVIEW OF THE APS 2015 DSM PLAN

In 2015, the Company intends to continue its currently approved DSM portfolio of programs and maintain an overall DSM budget of $68.9 million. *See* Attachment 1. This budget was approved in the APS 2013 DSM Plan for each of the program years 2013 and 2014. For 2015, APS has reallocated the budget among programs already approved by the Commission in order to reflect current market conditions. For instance, the Residential New Construction program budget is currently approved at a level of $3,151,000 annually; however, APS believes that a budget of $4,765,000 will be needed in 2015 to meet the market demand for this program. The additional funding of $1,614,000 for this program has been reallocated from other programs to ensure that the total budget remains flat at $68.9 million. This reallocation is shown in Attachment 1.

The APS 2015 DSM Plan continues existing authorized programs and measures, all of which were reviewed for cost effectiveness by Staff as part of the Company's 2013 DSM Plan using avoided costs consistent with the APS 2014 Integrated Resource Plan. As the cost effectiveness calculations and related inputs have not changed in any significant respect, a full cost effectiveness review by Staff is not required in order to continue these cost effective programs. The minor modifications as proposed herein for

[1] In the event that Staff intends to perform updated benefit/cost analysis on all programs and measures, APS's 2014 DSM Annual Program Report filed February 27, 2015 contains updated benefit/cost calculations using Staff's methodology for all programs and energy efficiency measures based on actual results in 2014.

the Light-Emitting Diode (LED) lighting measure, the Multi-Family Energy Efficiency Program (MEEP), and the Non-Residential Retro-Commissioning measure improve the cost effectiveness of these programs and measures that have already been found to be cost effective by Staff.

The Company proposes to include one new DSM program (Residential Prepaid Energy Conservation Program) and one new DSM initiative (APS System Savings) in 2015, both of which offer opportunities to count legitimate energy efficiency savings which the Company expects to achieve in 2015. Including these additional savings will allow APS to continue to work toward the Energy Efficiency Standard at a lower cost than would be possible without approval of these opportunities.

Decision No. 74949 (February 9, 2015), in the Company's 2015 Renewable Energy Standard Implementation Plan proceeding, states that APS should consider proposing solar water heating (SWH) as an energy efficiency measure rather than a renewable energy program after the renewable incentives expire at the end of 2015. APS is in the process of evaluating SWH as an EE measure and, if cost effective, will propose one in its 2016 DSM Plan.

In addition, the Company is proposing to utilize a portion of unallocated funds currently being held in the DSMAC account to supplement the funds expected to be collected through the adjustor charge and through base rates in order to maintain the currently approved APS DSM budget of $68.9 million. Applying these funds to 2015 spending allows the Company to keep the DSMAC at current levels.

Table 1: Revenue Sources for Proposed 2015 DSM Budget

Revenue Source	Budget Contribution
Base Rates	$10,000,000
DSMAC	$53,800,000
Collected but Unallocated Funds	$5,100,000
	$68,900,000

II. ESTIMATED 2015 SAVINGS

Under the EES, APS must achieve cumulative energy savings equal to twenty-two percent (22%) of its 2019 retail sales by the end of calendar year 2020. To stay on track toward that 22%, in 2015 APS plans to achieve cumulative energy savings equal to 9.5% of its 2014 retail energy sales, which, after accounting for savings already achieved to date through 2014, means that the incremental goal for 2015 is approximately 539,000 megawatt-hours (MWh), an increase of 43,000 MWh over 2014 actual savings achieved.[2] With sufficient customer participation in EE programs in 2015, APS anticipates that at the end of 2015 it will be on track toward achieving compliance with the cumulative Energy Efficiency Standard goal. Attachment 1 summarizes the MWh savings expected in 2015, by program and initiative.[3]

III. PROPOSED NEW PROGRAM AND INITIATIVE FOR 2015

The Company proposes one new energy efficiency program and one new DSM initiative. The MWh savings expected from these new items is an important part of the Company's plan to meet the 2015 goal and keep the budget flat at 2013 levels in calendar year 2015.

A. Residential Prepaid Energy Conservation Program

In 2014, APS completed its Residential Prepaid Energy Conservation pilot program (Prepay Program). *See* Decision No. 72214 (March 3, 2011).[4] The Prepay Program is a "pay as you go" daily billing program that provides residential customers with frequent feedback on energy costs, thereby assisting participants to better understand energy efficiency and conservation efforts and allowing greater control in the management of household electric utility budgets. Program participants periodically pay in advance for electric service in lieu of paying a monthly bill after the energy is

[2] Please see APS's 2014 DSM Annual Progress Report filed in Docket No. E-00000U-15-0053 on February 27, 2015.

[3] All calculations are consistent with Decision No. 74813 (November 13, 2014) and do not include energy delivered to Freeport McMoran's Bagdad mine in energy efficiency savings goals, DSM budgets, and DSMAC revenue requirements.

[4] Final end-of-pilot reports for the HEI Pilot were filed by the Company on February 13, 2015 in Docket No. E-01345A-10-0075.

consumed. APS filed the results of the Prepay pilot program on February 13, 2015. Those results demonstrated that the program increased customer awareness of energy usage, resulting in increased efficiency and average energy savings of 7.5% per participating household (excluding the impact of any disconnects and participation in other energy efficiency programs). The results of the pilot are discussed in detail in the Company's end-of-pilot report and will not be repeated here. However, based on the success of the Prepay Program in creating energy savings, APS proposes continuing this program in its DSM portfolio.

Based on current enrollment of approximately 2,000 customers, which APS intends to maintain in 2015, APS expects the Prepay Program to provide energy efficiency savings of approximately 2,600 MWh in 2015.

The annual cost to maintain this program is approximately $83,500, which APS proposes to recover in the Company's 2015 DSM budget through reallocation of existing program funding (please see Attachment 1), rather than through any increased funding.

The Company is also proposing two specific administrative adjustments to the Prepay Program. The first proposed adjustment modifies an AutoPrepay option, available to participants who proactively enroll in the Program, in which the customer would receive the same monthly credit available to other customers who pay their bill on an automatic electronic basis (currently $0.48/month).[5]

The second proposed administrative adjustment adds a sentence to the Customer Prepay Service Agreement that would require the customer to contact APS if the customer intends to permanently close an account. In cases where APS is not informed that the customer has intentionally allowed a credit balance to run out in anticipation of closing an account, a final bill with an unexpected debit balance will often be issued due

[5] This option is consistent with the Company's Service Schedule 1, Terms and Conditions for Standard Offer and Direct Access Services, Paragraph 4.3.3: "Where Company is responsible for rendering the Customer's bill, Company will provide a monthly incentive of $0.48 per Customer to Customers who elect to pay their bills using the Company's electronically transmitted payment options AutoPay, SurePay or similar programs."

to the daily billing process. This change will prevent customers closing accounts from receiving additional charges.

Additional information on the Prepay Program is provided in Attachment 2.

B. APS System Savings Initiative

The APS System Savings Initiative is proposed in accordance with Decision No. 74406 (March 19, 2014). In that Decision, the Commission ordered that the Company may count, subject to inclusion and review in a subsequent DSM Plan, cost effective energy savings from improvements to APS facilities and generation systems toward compliance with the EES.

In 2015, the Company is implementing three projects that will provide energy efficiency savings under the APS System Savings Initiative. These are the Conservation Voltage Reduction (CVR) project, the Generation Plant Ancillary Load project, and the Streetlights and Facilities project.

The CVR project achieves energy savings through load reductions by reducing the voltage delivered to households and businesses located on targeted feeders in the APS service territory. APS plans to implement CVR on a total of 17 of its distribution feeders in 2015 and expects to achieve approximately 10,600 MWh of savings through this project in 2015.

The Generation Plant Ancillary Load project will replace, install, or upgrade certain plant equipment. Specifically, in 2015 the Company intends to replace forced draft fan motors, water well pumps, and compressed air systems at various APS generation plants. These equipment upgrades produce energy savings similar to the savings generated through the Non-Residential Large Existing Facilities Program that is offered to APS's commercial and industrial customers. The Company anticipates approximately 1,600 MWh of savings will be realized due to these upgrades in 2015.

The Streetlights and Facilities project will install LED lighting in APS-owned community street lights and replace lighting equipment in APS office buildings. Again, these lighting upgrades produce energy savings equivalent to the savings produced when

customers take these same actions at their facilities, and these measures have already been found to be cost effective within the APS Non-Residential Customer EE programs. This project is expected to contribute approximately 800 MWh of energy efficiency savings in 2015.

APS is not requesting any funding through the Company's DSMAC for the APS System Savings Initiative, and the Company will not count the net benefits of these programs when calculating the 2015 Performance Incentive. APS does request, however, that it be allowed to include the impact of all three projects within the System Savings Initiative in the determination of the Company's energy efficiency achievement tier level for the Performance Incentive and include only the energy savings from the Conservation Voltage Reduction project in the calculation of the Company's Lost Fixed Cost Recovery (LFCR) mechanism. This treatment would be consistent with that afforded to the Company's building codes and appliance standards savings.

Additional information on each of these projects is provided in Attachment 3.

IV. PROPOSED PROGRAM MODIFICATIONS FOR 2015

APS also proposes several modifications to existing energy efficiency programs in order to maintain and/or improve the cost effectiveness of the overall DSM portfolio for its customers.

A. Suspension of the Shade Tree Program

As shown in the Company's 2014 DSM Annual Progress Report, the Company's Shade Tree program did not reach a benefit/cost ratio of 1.0 in 2014 (based on the benefit/cost methodology ordered in Decision No. 73089). The program also was not cost effective in 2013, and while initiatives to improve the program in 2014 did increase participation and reduce costs, these efforts did not return the program to cost effectiveness. Due to these results, APS has suspended the Shade Tree program for 2015 and will work with stakeholders to redesign the program to improve its benefit/cost ratio for possible future consideration.

B. LED Lighting

In Decision No. 74406, the Commission approved LED lighting as a measure to be included in the Residential Consumer Products program. Staff's analysis found LED bulbs to be cost effective, with a benefit/cost ratio of 1.08. For 2015, APS proposes to expand this measure to additional residential programs as a direct install measure in the MEEP and the Home Performance with ENERGY STAR program, and as a limited educational give away item of up to 50,000 LEDs per year within the Consumer Products and the Non-Residential programs (similar to the existing CFL give away measure).

APS believes that expanding this measure offers educational benefits by introducing new lighting technology to customers, and provides opportunities for additional cost effective savings. Expanding this measure can be achieved within the proposed 2015 budget with a reallocation of existing program funding as shown in Attachment 1, and without any budget increase.

C. MEEP New Construction Tiers

In order to maximize energy savings and to align with current market needs, APS seeks approval to modify the existing minimum efficiency level requirements for the MEEP builder option packages (BOPs). APS proposes to keep the same three levels of BOPs and the same program incentive levels that exist today; however, the Company proposes to require a higher level of energy efficiency savings to qualify for each incentive level. As the baseline efficiency level in multi-family new construction continues to increase, these more stringent requirements will help the MEEP program incentivize builders to continue to move the market forward and achieve increased efficiency levels. Proposed incentive savings levels are summarized in Table 2:

Table 2: Proposed Incentive Levels

Builder Option Packages (BOP) Performance Path	BOP	Current HERS Score	Proposed HERS Score	Incentive
Building performances under a combination of installed measures must meet or exceed the listed HERS[6] scores to qualify for an incentive.	BOP 1	81	70	$200
	BOP 2	78	65	$300
	BOP 3	75	60	$400

D. Non-Residential Retro-Commissioning Incentive Cap

Currently, non-residential programs cap the incentives available for retro-commissioning at the lower of 75% of cost or $20,000. This "double cap" discourages large retro-commissioning jobs with significant potential energy efficiency savings because of the artificially low cap of $20,000. Large retro-commissioning jobs that produce significant energy savings would be eligible for a larger incentive than $20,000, while still not exceeding 75% of the cost of the job.

APS proposes to raise the $20,000 incentive cap to $100,000 and continue to maintain the 75% incremental cost cap.

V. UNALLOCATED DSMAC BALANCE

Due to a number of factors, APS has achieved annual energy efficiency savings goals while spending less than the overall amount of funds collected from customers. As a result, the DSMAC balancing account contains approximately $37 million in unallocated funds as of March 1, 2015.

In 2015, the current DSMAC of $0.001845/kWh (for residential and non-demand-billed general service customers) and $0.696/kW (for general service demand-billed customers) is expected to collect approximately $53.8 million. Additional funding of $10 million per year is collected through the Company's base rates, bringing the total amount of funds collected from customers in 2015 for DSM programs to

[6] The Home Energy Rating System (HERS) index is the industry standard by which a home's energy efficiency is measured. A lower score on the HERS index indicates a home is more energy efficient, with each point on the index equal to approximately a 1% efficiency improvement over the base case reference home.

approximately $63.8 million. APS proposes to use $5.1 million of the available unallocated funds to maintain the 2015 budget of $68.9 million.

While APS has proposed to use $5.1 million of the unallocated funds in 2015, the Company understands the Commission may wish to use more of the unallocated funds which would reduce the DSMAC, and lower customer rates, for 2015.

VI. CONCLUSION

APS respectfully requests that the Commission expeditiously approve this Application as follows:

1. Approve the Company's request to include APS Residential Prepaid Energy Conservation Program in its DSM portfolio and count energy savings toward the EES, and approve proposed administrative adjustments to the Program;
2. Approve the Company's request to count the savings generated from the Systems Savings Initiatives outlined in this filing towards compliance with the EES;
3. Approve the use of the APS System Savings Initiative energy savings in determination of the Company's energy efficiency achievement tier level for determining the Performance Incentive and include the savings from the CVR project in the Company's annual LFCR calculations;
4. Approve the Company's request to include LED lighting as a measure in the APS Multi-Family Energy Efficiency Program and the Home Performance with ENERGY STAR program, and as a giveaway in the Consumer Products and the Non-Residential programs;
5. Approve the Company's request to modify existing minimum efficiency level requirements for the Multi-Family Energy Efficiency Program builder option packages as discussed herein;
6. Approve the Company's request to increase the $20,000 cap for non-residential retro-commissioning incentives to $100,000; and

7. Approve the Company's request to utilize approximately $5.1 million in unallocated funds to maintain the Company's currently approved budget levels for 2015 and continue the DSMAC adjustor at currently approved levels.

RESPECTFULLY SUBMITTED this 20th day of March, 2015.

By: _____
Melissa M. Krueger
Thomas L. Mumaw

Attorneys for Arizona Public Service Company

ORIGINAL and thirteen (13) copies of the foregoing filed this 20th day of March, 2015, with:

Docket Control
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, Arizona 85007

ATTACHMENT 1
2015 PROGRAM BUDGET AND SAVINGS GOALS

APS Demand Side Management Programs - 2015 Program Budgets and Savings Goals

Program	Rebates & Incentives	Training & Technical Assistance	Consumer Education	Program Implementation	Program Marketing	Planning & Administration	Total Program Costs	Est Annual MWh Savings
Residential Programs								
Consumer Products	$5,707,468	$32,000	$77,000	$2,260,000	$500,000	$450,000	$9,026,468	100,487
Existing Homes HVAC	$4,172,000	$150,000	$150,000	$1,483,000	$200,000	$366,000	$6,521,000	14,745
Existing Homes - Home Performance	$2,888,720	$40,000	$50,000	$905,000	$170,000	$170,000	$4,223,720	7,511
New Construction	$3,630,000	$100,000	$15,000	$325,000	$250,000	$445,000	$4,765,000	10,860
Appliance Recycling	$273,000	$0	$29,000	$765,000	$325,000	$173,000	$1,565,000	11,358
Conservation Behavior	$0	$0	$0	$1,422,000	$0	$90,000	$1,512,000	52,418
Multi-Family	$1,061,174	$0	$10,000	$700,000	$10,000	$166,000	$1,947,174	8,886
Pre Pay	$0	$5,000	$2,000	$8,000	$5,000	$63,500	$83,500	2,643
Limited Income	$2,291,000	$10,000	$20,000	$50,000	$30,000	$75,000	$2,476,000	1,440
Total	**$20,023,362**	**$337,000**	**$353,000**	**$7,918,000**	**$1,490,000**	**$1,998,500**	**$32,119,862**	**210,348**
Non-Residential Programs								
Large Existing Facilities	$12,550,197	$506,199	$53,000	$4,359,836	$748,320	$400,000	$18,617,552	175,050
New Construction	$2,061,954	$70,557	$18,000	$408,398	$97,000	$125,760	$2,781,669	24,746
Small Business	$1,155,104	$95,155	$13,000	$628,104	$80,200	$95,000	$2,066,563	14,947
Schools	$1,447,067	$82,856	$14,000	$1,316,900	$75,200	$55,000	$2,991,023	15,174
Energy Info Service	$54,600	$10,000	$2,000	$24,000	$7,520	$3,000	$101,120	84
Total	**$17,268,923**	**$764,767**	**$100,000**	**$6,737,238**	**$1,008,240**	**$678,760**	**$26,557,928**	**230,000**
APS System Savings							$0	13,000
Codes & Standards							$150,000	31,536
Demand Response							$2,882,739	54,009
Total EE/DR Program 2015 Estimates							**$61,710,528**	**538,893**
						Measurement, Evaluation & Research	$2,100,000	N/A
						Performance Incentive	$5,089,472	N/A
						Total 2015 DSM Budget	**$68,900,000**	

Attachment 2
Residential Prepaid Energy Conservation Program

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Residential Prepaid Energy Conservation Program

Program Concept and Description

The Residential Prepaid Energy Conservation Program[1]("Prepay Program") is a 'pay as you go' daily billing program that provides participants with energy efficiency and conservation information to help them better understand and manage their electric utility budget. Customers periodically prepay for electric service in lieu of paying a monthly bill. APS provides participating customers with frequent feedback on the balance in their prepaid energy account via text, email and/or phone call alerts to assist them in managing their energy consumption. This combination of energy information/education and direct feedback on energy spend is a powerful tool that helps participating customers save energy and reduce energy costs.

APS launched the Prepay Program pilot in 2012 and ramped up enrollment to maintain approximately 2,000 customers. Results of the pilot indicate that energy savings from the Prepay Program can be substantial, with an average of 7.5% annual savings per participant. This finding is consistent with prepay deployments at other utilities which indicate that frequent energy usage feedback saves the average participating customer between 4-12% on their electric bill annually. For more information on the specific findings from the Prepay Program pilot, please see the pilot evaluation report filed on February 13, 2015 with the ACC.

Target Market

The Prepay Program targets APS Residential customers equipped with an AMI meter with remote disconnect/reconnect capability throughout the service territory. This program could attract customers who are budget conscience and prefer to pay their electric bill in smaller increments on dates they choose.

Current Baseline Conditions

With the exception of the customers who were enrolled in the APS Prepay Program pilot, all other residential customers are standard billed. Standard billing means that customers receive a bill (either a paper bill mailed via USPS or an ebill sent via email) once per billing cycle (every 25-35 days). The customer then has approximately 10 days to make a payment using one of the many payment channels. If payment is not made by the 19th business day, a late payment fee is assessed. If payment is still not received, the standard billed customer may be subject to a door hanger and fee, disconnection and reconnection fees. The customer might also have to pay a deposit to restore service.

Standard bill customers have access to usage information on aps.com, but do not receive frequent electric cost feedback and therefore are less likely to tie their energy usage behaviors to their bill.

For the Prepay Program, participating customers prepay an amount of their choosing on the day and time of their choosing using any of the existing APS payment channels. Prepay Program customers receive frequent (either daily or low balance) account balance

[1] Formerly filed as Option E: Prepay Energy Service under the Home Energy Information Pilot.

feedback through email, text, or phone alerts. The alerts help customers to directly connect the previous day's energy behaviors and appliance usage with spending. This helps customers better understand their usage patterns and opportunities for energy savings and helps influence future behavior. Results from previous deployments at other utilities (Salt River Project and Oklahoma Electric Cooperative among others) indicate savings of 4-12% for the average participating customer annually. The APS Prepay Program pilot participants reduced usage by 7.5% on average.

Program Eligibility

Customers participating in the Prepay Program must be APS residential customers who have AMI metered service with remote disconnect/reconnect capability. Customers must also have service plans and billing features that do not depend on monthly billing. Some monthly billing programs not eligible for the Prepay Program include Equalizer, SurePay, AutoPay. Customers participating in the medical care preparedness program are not eligible for the Prepay Program due to life safety concerns. Customers may own or rent their residences and may be new or existing APS customers.

Program Rationale and Objectives

The rationale for the program is that customers could have a significant opportunity to save energy, as well as have more control over their energy usage and electric bill. Based on the results of the pilot program, the Prepay Program provides a vehicle for cost effective energy savings as part of the APS DSM portfolio.

The objectives of the program are to:

- Provide a convenient energy spend feedback and interaction system for customers;
- Provide better information and increased awareness about how to manage energy costs;
- Reduce peak demand and overall energy consumption through customer awareness and cost feedback; and
- Contribute to meeting the energy savings goals in the APS energy efficiency program portfolio by providing customers with more frequent feedback on their energy spend so they can take energy saving actions.

Program Implementation

APS launched the Prepay Program pilot on July 17, 2012 to qualifying customers who had expressed an interest in Prepay. Since launch, APS has maintained approximately 2,000 customers on the program.

Prior to enrollment, APS ensures that all customers adequately understand the program by reviewing the Prepay Service Agreement with the individual customer. Customers must clearly consent to each item in the agreement before being enrolled. APS also provides a welcome packet to each new participant that includes the Prepay Program Guidelines, the Prepay Service Agreement, brochure on how the program works and information on how to save energy with APS Prepay.

Customers have 24 hour, 7 day access to their account balance by calling the APS automated phone system, speaking with an associate or checking their aps.com 'My Prepay' web portal. APS provides customer cost feedback by sending proactive alerts to help customers manage their account balance. Customers identify their preferred alert mechanism (email, phone or text message) and may designate another family member or friend to also receive alerts. Customer contact information for alerts may be changed as often as desired at no charge.

If an APS Prepay customer's account is zero or a negative balance, the customer would receive a no credit disconnect notice by 8 a.m. the following day. If APS does not receive a payment by 11 a.m. on the day of the no credit disconnect alert, a disconnect order is sent. To reconnect service, the customer only needs to establish a credit balance. There are no late, door hangar, disconnect or reconnect fees.

Participating customers are expected to take energy conscious actions that result in annual average kWh savings of 7.5% per customer on average based on the account balance alerts they receive from APS.

This program does not require any additional customer investment and saves the individual participating customer on late, door hangar, disconnect and reconnect fees.

APS also offers a number of convenient customer payment options that are not limited by geography or business hours. A chart included in the welcome brochure clarifies the processing fees (if any) and lag time for payments. Payments may be made at APS customer service offices, aps.com, APS automated payment system via phone, kiosks at local retailers, electronic funds transfer, authorized pay stations, and by U.S. mail.

Customers can also elect to enroll in AutoPrepay on aps.com. AutoPrepay is an APS Prepay option where the customer authorizes APS to automatically debit their bank account when their Prepay balance reaches a minimum threshold. The customer selects the payment amount and minimum threshold.

Incentive Design

APS Prepay does not have a direct customer incentive, but participating customers may save 4-12% on their annual electric charges. Customers participating in the program do benefit from a waiver of the security deposit, late fees, and disconnect or reconnect fees.

Delivery Strategy and Administration

APS will implement the Program in house and administer similar to the pilot. APS proposes to maintain the current enrollment level of approximately 2,000 customers while working on operational and scalability challenges with moving from a monthly to a daily billing system and managing the alert technology.

With ACC approval, APS proposes to make the following specific, minor adjustments to the program to enhance the customer experience:

- AutoPrepay—APS requests that customers that proactively enroll in AutoPrepay receive the $0.48 monthly bill credit outlined for other automatic electronic payment options in Section 4.3.3 in Service Schedule 1. Upon ACC approval, APS would implement the system change to credit the eligible customers in their daily billing an amount not to exceed $0.48 each monthly billing cycle.
- Service Agreement—Due to the nature of the Prepaid Energy Conservation Program, some customers elect to let their credit balances run out instead of calling APS to disconnect or cancel service. Because the program is based on daily and not real time usage, when customers let credits run out to disconnect or cancel service they often will end up with a small debit balance and receive a final bill after five consecutive days of disconnection. APS requests to add the following line item to the Service Agreement to ensure customers are aware of this.

  "I understand that if I want services to be disconnected or my account closed, I shall contact APS by phone or online to update my account in advance of reaching a zero balance in order to schedule a disconnect time and to avoid unwanted debit balances."

How to Leverage with Existing Programs

Participation in APS Prepay does not preclude customers from participating in other DSM programs. APS Prepay customers will be provided information for additional energy savings options, including information about other energy efficiency programs to help customers maximize savings potential. This information will be provided by way of energy efficiency tips, as well as through links on the My Prepay page on aps.com.

Marketing and Communications

The marketing strategy will include the following components:

- Promotions, communications and active enrollment on aps.com
- Call center and APS business office referrals (new and existing customers)
- Community event outreach

Program Implementation Schedule

APS will continue the current program in 2015. Upon ACC approval of removing the pilot status and approving the ability to count energy savings for participating customers, APS will implement the specific minor customer experience changes requested above as soon as possible. The pilot offered the opportunity to design, develop and better understand ways to implement the Program and gave insight into changes that need to be made to the Program in the future.

Measurement, Evaluation and Research Plan

APS will integrate the Prepay Program measurement and evaluation activities into our overall DSM research strategy. As a result of the pilot, APS has developed a future MER plan to continue to evaluate this program. Evaluations will include a full billing analysis

approach that will use pre and post data with both treatment and control group participants. Treatment group participants are those that were enrolled in the program and the control group will be similar households to the treatment group.

Program Budget

The 2015 proposed budget is detailed below.

Table 1 - 2015 Prepay Program Budget

	2015
Training and Technical Assistance	$5,000
Consumer Education	$2,000
Program Implementation	$8,000
Program Marketing	$5,000
Planning and Administration	$63,500
Total	**$83,500**

Estimated Energy Savings

The Prepay Program pilot evaluation used a detailed billing interval data analysis pre and post enrollment usage with treatment and control groups. The pilot evaluation results show average annual energy savings of 7.5% of total consumption for pilot participants using a regression analysis of customers with at least 6 months pre and post data that matched the same months of the control group. This 7.5% energy savings is the net annual savings per participant after removing savings from any disconnections and from participation in other DSM programs. These savings are believed to be due to the conservation effect of better relating energy use activities to consumption. Using this savings rate and the average annual usage of a Prepay customer, the MER verified deemed annual kWh savings per Prepay customer is 1,321 kWh (at the generator, including 7.0% line loss factor which equates to 1,235 kWh at the customer). Please see the table below for participation and savings being proposed for this program.

Table 2 – 2015 Prepay Program Net Annual Energy Savings

Approximate number of participants	2,000
Avg. Coincident peak demand savings (kW) per participant (including line losses and reserve margin)	0.50
Avg. Annual energy savings (kWh) per participant (including line losses)	1,321
Annual program energy savings (MWh)	2,643

In addition to the energy savings shown in Table 2, it is estimated that the program will produce the following environmental benefits shown in Table 3.

The projected environmental benefits provided in Table 3 are based on savings from the air emission and water consumption of the generation facility that may be avoided due to this program.

Table 3 - 2015 Projected Environmental Benefits

Water (Million Gallons)	1
Sox (lbs)	12
NOx (lbs)	223
CO_2 (Million lbs)	2

Prepay Program Cost Effectiveness

As proposed herein, the Prepay Program has a cost benefit ratio of 1.03. The Prepay Program end of pilot report detailed third party verified savings analysis and proved that the program is cost effective.

ATTACHMENT 3
APS SYSTEM SAVINGS INITIATIVE

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APS System Savings Initiative
Program Concept and Description

Arizona Public Service ("APS" or "Company") is proposing an initiative to save energy through energy efficiency upgrades to APS generation facilities, the transmission and distribution system, and APS owned streetlights, buildings and facilities. This proposal is submitted in accordance with ACC Decision No. 74406, which states that, "APS may count cost-effective savings from transmission and delivery system improvements" (Page 42 line 13) and, "Savings from improvements to APS company facilities and generation systems towards compliance with the energy efficiency standard" (Page 42 line 22 - Page 43 line 2). Decision No. 74406 further ordered that "Specific programs including anticipated costs and energy savings must be proposed and approved through the implementation plan process" (Page 42 line 24-26). This filing fulfills this requirement.

The APS System Savings initiative offers unique opportunities to achieve and count cost effective, low cost energy efficiency savings that can help meet the increasing goals of the Energy Efficiency Standard. APS System efficiency improvements can serve to leverage investments in technology starting at the source of generation and continuing to the customer meter without needing to fund customer incentives, thus reducing upward pressure on DSMAC charges. At the same time, energy efficiency improvements at the system level can exert a downward pressure on APS rates because they can reduce system costs for all customers without forgoing retail sales. APS is proposing that no System Savings program costs would be recovered through the DSMAC, no rebates would be paid, and no performance incentives would be earned from this initiative. Because of this, the initiative is a cost effective approach for meeting the Energy Efficiency Standard ("EES"), and is a nice compliment to the company's current portfolio of customer-sited demand side management programs. Due to the broad nature of system savings improvements, many customers can benefit equally from the savings, since this initiative does not have individual 'participants' and 'non-participants' like customer-sited efficiency. In some cases, such as the conservation voltage reduction project, APS system savings initiatives will result in direct energy and bill savings for APS customers.

The proposed initiative would be similar to those in many other states that allow efficiency improvements on the utility system to count towards energy efficiency resource standard goals including Colorado, Delaware, Florida, Iowa, Minnesota, Virginia, and Washington. APS System Savings projects include many of the same types of energy savings measures as those that are being installed at customer sited facilities – the only difference being that they are installed on APS facilities rather than customer facilities. System Savings projects proposed here include, but are not limited to, the following elements:

1) **APS Streetlights and Facility Energy Efficiency Projects** – This initiative includes energy efficiency improvements to APS buildings and facilities such as APS offices, customer service centers, and other company facilities including APS owned community streetlights. Energy efficiency measures at APS buildings and facilities are similar to those found in commercial buildings

throughout Arizona, so this initiative will include currently approved measures in the APS Large Existing Facilities and New Construction energy efficiency programs for non-residential customers, which have already been screened by ACC Staff for cost effectiveness. Potential prescriptive and/or custom measures will be considered and evaluated for savings and cost effectiveness in the same way that customer-sited measures are considered in the APS Non-Residential programs. In 2015, planned projects include upgrades to selected community streetlights throughout the APS service territory and lighting replacements as part of the APS Deer Valley B3+4 renovation project.

2) **APS Transmission and Distribution System Energy Efficiency Projects** – This initiative includes measures that improve the energy efficiency of the APS energy transmission and distribution system, between the point of generation and the customer end-use site. This includes projects such as Conservation Voltage Reduction, which is projected to be installed on a total of 17 feeders within the APS system by the end of 2015. Conservation voltage reduction systems include a collection of sensors, voltage measuring and regulating control devices, analytical software, and communications products that work together to allow a utility to continuously analyze and control distribution power factor and system voltages. The system provides enhanced voltage control and allows for average voltage reduction of approximately 1.5% on participating distribution feeders. This project will result in direct customer energy efficiency and bill savings. Savings will be evaluated and verified based on a pre and post savings analysis on each affected feeder.

3) **APS Generation Facility Energy Efficiency Projects** – This initiative includes measures that improve the energy efficiency of APS generation facilities and reduce the ancillary energy requirements of the facility. These measures are similar to those found at large commercial/industrial processing facilities within the APS territory. In 2015, energy efficiency projects planned at APS generation facilities include 1) replacement of forced draft fan motors at the Four Corners facility, 2) replacement of the compressed air system at the Four Corners facility, and 3) replacement of well pumps at the Cholla facility. Within the APS Large Existing Facilities program, these are typically handled as custom efficiency projects, since they fall outside of the typical prescriptive list of measures. Therefore, APS proposes that generation facility energy efficiency projects will be handled and evaluated for savings in the same way as a custom project within the Large Existing Facilities non-residential customer energy efficiency program.

Target Market

The focus for this initiative is the APS electricity generation system, the APS transmission and distribution system, and APS owned streetlights and facilities.

Current Baseline Conditions

APS currently owns and operates commercial office space throughout the service territory, with the majority in the Phoenix metro area. Most APS business offices and operations centers are housed in typical Arizona commercial building stock, which offers the same potential energy savings opportunities as other commercial facilities throughout the state. Many APS buildings are more than 20 years old and offer many cost effective opportunities for energy efficiency upgrades including lighting, HVAC, and building controls. In addition, APS owns many community streetlights throughout the service area that offer opportunities for energy efficiency lighting upgrades with long lasting LED bulbs and better lighting controls. All of these opportunities are similar to customer-sited energy efficiency projects that are currently being rebated through APS non-residential customer energy efficiency programs.

The APS transmission and distribution system includes approximately 1300 distribution feeders located throughout 11 counties in Arizona. New distribution system energy efficiency technologies are becoming available, such as high efficiency transformers and better voltage monitoring and control equipment, which offer opportunities for reducing line losses, improving distribution system efficiencies, and saving energy. While not all distribution feeders offer potential for savings, many feeders can be installed with integrated voltage regulation and control systems that can save energy. In 2015, APS plans to complete installation of conservation voltage reduction technology on a total of 17 feeders.

APS generation facilities include ancillary loads like fan motors, cooling system water pumps, facility lighting systems, and other equipment loads needed to operate the plant. As these facilities age, there are opportunities for cost effective energy efficiency upgrades. Although located at generation facilities, they are comprised of the same measures (like motors, pumps, lighting, and controls) that are currently being rebated through APS non-residential customer energy efficiency programs.

Program Eligibility

This initiative will be limited to the APS generation system, transmission and distribution system, and other APS company facilities within the APS service territory.

Program Rationale and Objectives

The objective of this initiative is to take advantage of opportunities for saving energy within APS generation, transmission, distribution and operations facilities and for counting these savings towards meeting EES goals.

The APS System Savings Initiative offers the potential for significant cost effective energy savings that can lower EES compliance costs for ratepayers while meeting energy savings objective of the EES. APS system savings will benefit APS customers without requiring any additional investment costs for participants. Some system savings initiatives – such as conservation voltage control on distribution system feeders - offer

opportunities for direct customer energy and bill savings without the need for additional customer investment. And many other APS system savings opportunities are composed of the same energy efficiency measures that are currently being rebated for customers. These represent cost effective savings that should be counted toward the EES goals.

As the annual goals of the EES continue to increase through 2020, it may require increasing annual budgets to meet compliance with the goals, unless we can find opportunities for achieving savings at a lower ratepayer cost. The APS System Savings initiative provides an opportunity to fill the gap between the current annual savings level from customer programs and the higher annual goals needed to meet the Energy Efficiency Standard from 2015-2020. And these savings can be achieved without requiring funding for implementation, marketing, rebates or incentives.

Program Implementation

APS System Savings initiatives will be implemented in-house by APS. No program implementation costs will be charged through the DSMAC.

Incentive Design

No incentives will be utilized in this program. APS does not intend to collect a rebate or any type of performance incentive for any of the energy efficiency measures being installed. Similar to the codes and standards initiative, APS proposes that no net benefits will be considered from the system savings initiative for the calculation of the APS performance incentive. And as with codes and standards, APS proposes that the savings from the system savings initiative are counted towards the annual goals and towards the calculation of which performance incentive tier that APS qualifies for each year.

The System Savings initiative achieves the objective of increasing energy efficiency while reducing ratepayer costs, particularly since APS is not seeking to recover any program costs for this initiative through the DSM adjustor. In addition, most System Savings projects will not require any Lost Fixed Cost Recovery ('LFCR') adjustment since they will not result in lost revenues. However, in the case of projects such as Conservation Voltage Reduction, which do result in direct customer savings and APS lost revenues, APS requests that the Commission allow the Company to include energy savings from these programs in the calculation of the LFCR mechanism.

Delivery Strategy and Administration

APS will deliver and administer the program in-house. No administration costs will be collected through the DSMAC.

How to Leverage with Existing Programs

Due to the nature of this initiative, there are limited opportunities for leveraging with existing programs.

Marketing and Communications

This initiative does not have a marketing and communication budget and APS does not plan to collect any marketing and communications costs for this program through the DSMAC.

Program Implementation Schedule

APS intends to implement this initiative immediately upon approval by the ACC. All projects discussed in this initiative that are planned for 2015 are expected to be completed before the end of the year and information on project savings and costs will be included in the company's 2015 DSM Annual Progress Report that will be filed by March 1, 2016.

Measurement, Evaluation and Research Plan

The APS System Savings Initiative will be evaluated by an independent third party evaluation contractor. The Measurement, Evaluation, and Research Plan ("MER") will follow the same program requirements and savings analysis, measurement and verification protocols that are currently approved by the ACC for customer sited energy efficiency projects that participate in the APS Non-Residential Large Existing Facilities and New Construction programs. MER adjusted savings for this Initiative will be reported annually as part of the APS DSM Annual Progress Report filings. The report will document the total verified project energy savings for the year and distinguish between direct customer energy savings as a result of system savings initiatives that create lost revenues and APS system savings that do not result in lost revenues.

Program Budget

The program budget for implementing the APS System Savings Initiative is $0. APS is proposing that there would not be any new spending for this initiative collected through the DSMAC. There will be program evaluation costs to verify the energy efficiency savings achieved. These will be included within the current MER budget.

Estimated Energy Savings - 2015

APS Streetlights and Facilities Energy Efficiency Projects

- APS facility upgrades include measures such as lighting replacements, lighting controls, HVAC, and other measures that are typically found in commercial office space. There is also potential energy savings available for APS to upgrade APS-owned streetlights to high efficiency LED lights.
- Projects planned in 2015 include LED streetlight upgrades throughout the APS territory, as well as replacement of 200+ lighting fixtures at the APS Deer Valley B3+4 renovation project.
- APS estimates that there are approximately 800 MWhs of savings that will be achieved in 2015 from energy efficiency upgrades at APS Facilities. These savings will be evaluated and verified by an independent third party.

APS Transmission and Distribution System Energy Efficiency Projects

- Includes measures that improve the efficiency of the APS transmission and distribution system.
- Projects planned in 2015 include the installation of conservation voltage reduction technology on 17 distribution feeders.
- APS plans to operate this technology 8760 hours of the year, at an average voltage reduction of 1.5%. Estimated energy savings in 2015 are 10,600 MWhs. These savings will be evaluated and verified by an independent third party.

APS Generation Facility Energy Efficiency Projects

- Includes measures that improve the efficiency of APS generation facilities and reduce the ancillary energy requirements of the generation plant.
- Projects planned in 2015 include:
    - Replacement of 4 large forced draft air fan motors at the Four Corners generation facility. Each motor is approximately 3000 horsepower. Rather than being re-wound, these motors are being replaced with new, high efficiency units.
    - Replacement of a large compressed air system that provides compressed air throughout the Four Corners generation facility. The existing system is being replaced with a new higher efficiency system.
    - Replacement of water well pumps with new high efficiency pumps at the Cholla generation facility.
- Estimated energy savings from these projects in 2015 are 1600 MWhs. These savings will be evaluated and verified by an independent third party.

Environmental Benefits

In addition to the estimated energy savings shown above, it is estimated that the program will produce the following environmental benefits shown in Table 1.

The projected environmental benefits provided in Table 1 are based on savings from the air emission and water consumption of the generation facility that may be avoided due to this initiative.

Table 1 - 2015 Projected Environmental Benefits

Utility Water Savings	4.1 Million Gallons
SOx	58 lbs
NOx	1,099 lbs
CO_2	11.7 Million lbs

Program Cost Effectiveness

Although APS is not requesting any program cost recovery, net benefits, or performance incentives associated with the System Savings Initiative, the Company will still monitor,

measure, and report on project cost effectiveness using Staff's approved societal cost test methodology and only claim savings associated with cost effective projects.

APS Streetlights and Facilities Energy Efficiency Projects

- To ensure cost effectiveness, measures included in APS streetlights and facilities projects will only include measures that are currently approved as measures that can be rebated through the APS non-residential customer energy efficiency programs. In the case of any custom measures, they will be assessed and evaluated in the same manner that APS non-residential energy efficiency program custom measures are analyzed.
- APS will report actual 2015 project savings and cost effectiveness in the 2015 DSM Annual Progress Report filing.

APS Transmission and Distribution System Energy Efficiency Projects

- Based on current estimates of project costs and savings in 2015 using Staff's methodology, APS forecasts that the Conservation Voltage Reduction project will be highly cost effective with an estimated benefit/cost ratio of 2.0.
- APS will report actual 2015 project savings and cost effectiveness in the 2015 DSM Annual Progress Report filing.

APS Generation Facility Energy Efficiency Projects

- To ensure cost effectiveness, measures included in APS generation facility projects will only include measures that are currently approved as measures that can be rebated through the APS non-residential customer energy efficiency programs. In the case of any custom measures, they will be assessed and evaluated in the same manner that APS non-residential energy efficiency program custom measures are analyzed.
- APS will report actual 2015 project savings and cost effectiveness in the 2015 DSM Annual Progress Report filing.